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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,480	02/26/2004	Shin-ichi Uchara	Q80068	3109

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EXAMINER

NGUYEN, KEVIN M

ART UNIT	PAPER NUMBER
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2629

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,480

Applicant(s)

UEHARA ET AL.

Examiner

Kevin M. Nguyen

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/26/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Woodgate et al (US 7,058,252 hereafter Woodgate).

3. **As to claim 1**, figures 44 and 46 of Woodgate teaches an image display device comprising:

a light source (60);

a display panel (a pixel plane 468, fig. 43) disposed in front of said light source and having a plurality of pixel sections (460, 456) in the form of a matrix (fig. 44), each of said pixel sections including a first pixel for displaying an image for the first viewpoint (434, fig. 42) and a second pixel (440) for displaying an image for the second viewpoint,

said second pixel being disposed at a position apart from said first pixel in a first direction; and

an optical unit (lens 138, fig. 46) disposed in front of said display panel for deflecting light emitted from said first and second pixels in the first direction (332),

wherein each of said first and second pixels (one pixel in fig. 44) includes a transmissive region (456) for transmitting the light emitted from said light source to said optical unit and a reflective region (460) for reflecting the exterior light incident from the front to said optical unit, and wherein said transmissive region and said reflective region are arranged in a second direction (333) perpendicular to the first direction in each pixel (a horizontal gap 333 is perpendicular to a vertical gap 332), as discussed in col. 52, lines 20-53.

As to claim 2, Woodgate teaches an image display device according to claim 1, wherein said optical unit is a lenticular lens (the lenticular screen, col. 49, line 49) in which a plurality of cylindrical lenses is arranged in the first direction (332), said cylindrical lenses being disposed in each line in which said pixel sections extend in the second direction (333) corresponding to the longitudinal direction of said cylindrical lens (the lenticular screen, col. 5, lines 19-31, and col. 49, line 49).

As to claim 3, Woodgate teaches an image display device according to claim 1, wherein said optical unit is a parallax barrier (the parallax barrier, col. 3, line 30—col. 4, line 8, and col. 49, line 50) in which a plurality of slits is arranged in the first direction, said slits being formed for each line in which said pixel sections extend in the second

direction corresponding to the longitudinal direction of said slit (the slit of the parallax barrier, col. 4, lines 1-8, and col. 49, lines 39-50).

4. **As to claim 4**, Woodgate teaches an image display device comprising:

a light source (60, fig. 46);

a display panel (a pixel plane 468, fig. 43) disposed in front of said light source and having a plurality of pixel sections (456, 460) in the form of a matrix (fig. 44), each of said pixel sections including at least a first pixel for displaying an image for the first viewpoint (434 for a first viewer) and a second pixel for displaying an image for the second viewpoint (440 for a second viewer), said second pixel being disposed at a position apart from said first pixel in a first direction (332); and

a parallax barrier (the parallax barrier, col. 49, lines 39-50) interposed between said light source and said display panel, said parallax barrier being formed by arranging a plurality of slits for deflecting the light emitted from said light source in the first direction (332), in which case, said slits are disposed in each line of said pixel sections (456, 460) extending in a second direction (333) perpendicular to the first direction, said second direction (333) being the longitudinal direction of said slits (the slits of the parallax barrier, col. 4, lines 1-8),

wherein each of said first and second pixels (456, 460) includes a transmissive region (456) for transmitting the light emitted from said light source (60) and passed through slits of said parallax barrier to the front and a reflective region (460) for reflecting the exterior light incident from the front to the front, and wherein said

transmissive region and said reflective region are arranged in the second direction (333) in each pixel (one pixel in fig. 44), as discussed in col. 52, lines 20-53.

As to claim 5, Woodgate teaches an image display device according to claim 1, wherein each of said transmissive region 456 and said reflective region 460 is divided into a plurality of sub-regions (a red pixel 326, a green pixel 330, and a blue pixel 328) for color different from each other, and sub-regions for the same color are arranged along the first direction (332, col. 47, col. 24-31, and col. 52, lines 29-48).

As to claim 6, Woodgate teaches an image display device according to claim 4, wherein each of said transmissive region 456 and said reflective region 460 is divided into a plurality of sub-regions for color different from each other (a red pixel 326, a green pixel 330, and a blue pixel 328), and sub-regions for the same color are arranged along the first direction (332, col. 47, col. 24-31, and col. 52, lines 29-48).

As to claim 7, Woodgate teaches an image display device according to claim 1, wherein each of said transmissive region 456 and said reflective region 460 is divided into a plurality of sub-regions for color different from each other (a red pixel 326, a green pixel 330, and a blue pixel 328), and sub-regions for the same color are arranged along the second direction (333, col. 47, col. 24-31, and col. 52, lines 29-48).

As to claim 8, Woodgate teaches an image display device according to claim 4, wherein each of said transmissive region 456 and said reflective region 460 is divided into a plurality of sub-regions for color different from each other (a red pixel 326, a green pixel 330, and a blue pixel 328), and sub-regions for the same color are arranged along the second direction (333, col. 47, col. 24-31, and col. 52, lines 29-48).

As to claim 9, Woodgate teaches an image display device according to claim 5, wherein each of said at least one transmissive region 456 and said at least one reflective region 460 is divided into a red sub-region, green sub-region and blue sub-region (a red pixel 326, a green pixel 330, and a blue pixel 328, col. 47, col. 24-31, and col. 52, lines 29-48).

As to claim 10, Woodgate teaches an image display device according to claim 1, wherein said display panel is a liquid crystal display panel, col. 48, lines 1-3.

As to claim 11, Woodgate teaches an image display device according to claim 1, wherein said first direction is a horizontal direction of a display plane (the horizontal gap 333, fig. 44).

As to claim 12, Woodgate teaches an image display device according to claim 11, wherein said image for said first viewpoint is an image for the left eye 444 and said image for said second viewpoint is an image for the right eye 446 which has a parallax with respect to said image for the right eye to thereby provide a three-dimensional image, as described in col. 51, line 51 through col. 52, line 3.

As to claim 13, Woodgate teaches an image display device according to claim 1, wherein said first direction is a vertical direction of a display plane (the vertical gap 332, fig. 44).

As to claim 14, Woodgate teaches a portable terminal device including said image display device according to claim 1, laptop computer, as described in col. 1, lines 10-18.

As to claim 15, Woodgate teaches a portable terminal device according to claim 14, wherein said portable terminal device is any one of a cellular phone, portable terminal, PDA, game device, digital camera and digital video camera, as described in col. 1, lines 10-18.

5. **As to claim 16**, Woodgate teaches a display panel comprising a plurality of pixels (456, 460, fig. 44) in the form of a matrix, wherein each pixel includes a transmissive region (456) for transmitting light and a reflective region (460) for reflecting light, each of said transmissive region (456) and said reflective region (460) is divided into a red sub-region (326), green sub-region (330) and blue sub-region (328) and wherein the array direction (the array of gaps 332 and 33) of said transmissive region (456) and reflective region (460) is the same as that of said red sub-region (326), said green sub-region (330) and said blue sub-region (328) in each pixel, as described in col. 47, lines 24-31, and col. 52, lines 29-48.

Conclusion

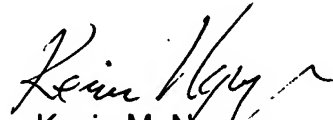
Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see

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<http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin M. Nguyen
Patent Examiner
Art Unit 2629

KMN
May 9, 2007